

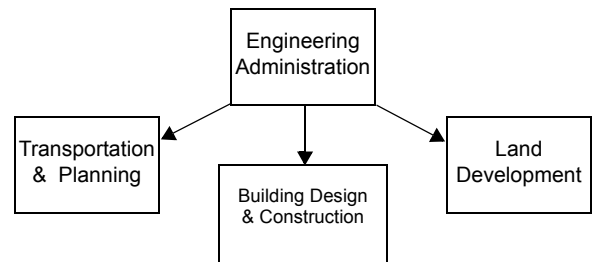
## ■ operating budget

Category	FY 2005 Actual	FY 2006 Forecast	FY 2006 Budget	FY 2007 Projected
Personal services	8,794,288	8,762,025	9,222,595	8,446,414
Materials & supplies	1,438,622	1,991,640	2,206,166	1,759,340
Capital outlay	0	0	96,800	0
Gross Expenditure	10,232,910	10,753,665	11,525,561	10,205,754
Expense Recoveries	(1,954,261)	(1,678,638)	(2,175,638)	(1,287,516)
Total Expenditures	8,278,649	9,075,027	9,349,923	8,918,238
Charges for Services	(610,101)	(606,900)	(554,900)	(1,373,900)
Net Expenditures	7,668,548	8,468,127	8,795,023	7,544,338
<i>Funded Staffing Level</i>	161.69	153.08	186.00	146.33

## ■ mission

To provide quality engineering and project management services to ensure properly planned, designed, and constructed public projects are delivered to the citizens of Memphis in a timely and cost-efficient manner.

## ■ structure



## ■ services

The City of Memphis covers an area of over 343 square miles that is connected by nearly 3,800 miles of roads. The Division of Engineering provides planning, design and construction administration to constantly improve and expand the City's infrastructure. The Division designs and manages the construction of all the City's capital projects. Engineering staff reviews all private development proposals to ensure the required public improvements are included.

## ■ issues & trends

With the slow economy over the past budget years, the resources to fulfill our mission have been limited. The Engineering Division has been called upon to do more with less and we have responded. Annexation continues to increase the areas to which we must provide services and stretch our abilities. Widening streets to provide additional capacity is becoming increasingly difficult and expensive. Solving drainage issues has placed increasing demands on divisional resources. However, the approved Storm Water Utility District will assist greatly in meeting the demand for drainage improvements throughout the City. The utilization of Intelligence Transportation System (ITS) technologies to increase the efficiency and capacity of the existing transportation system is necessary now more than ever. Traffic monitoring and control capabilities to allow appropriate response to collisions, gridlock, malfunctions, etc., are necessary to keep traffic moving with minimal impact.

## ■ strategic goals

- Improve the CIP planning, budgeting and design process to ensure public facilities are constructed within original budget estimates
- Adopt new policies to address flooding problems throughout the City
- Develop Intelligent Transportation System (ITS) strategies to monitor and control existing street network
- Provide on-street parking enforcement for areas of the City with meter parking
- Finalize Traffic Signal LED Modification

## ■ budget highlights

- Continued the expansion of vertical and horizontal control system for surveyors within Memphis and Shelby County, utilizing Global Positioning System (GPS)
- Provided signal maintenance and street marking services to newly annexed areas
- Substantially completed design of all streets included in the Southeast Annexation area plan of services

## ■ demand measures

Square miles within City Boundaries	343
Miles of roads within City boundaries	3,800
Street name and traffic control signs	300,000
Number of City streets	6,750
Intersections	20,000
Miles of road restriped	1,700+
City Traffic Signals/Flashers	830
City Traffic School Flashers	140
County Traffic Signals/Flashers	229
County Traffic School Flashers	104

## ■ fy 2006 performance highlights

- Traffic signal malfunctions are being repaired within 12 hours of notification
- Repaired 100% of all stop and yield signs within 24 hours of notification
- Coordinated with the Tennessee Department of Transportation to facilitate improvements to key interchanges along the urban interstate system
- Completed several studies and designs to address flooding problems throughout the City
- Continuation of installing LED Lights throughout the City's Traffic Signal System

## ■ charges for services

Category	FY 2005 Actual	FY 2006 Forecast	FY 2006 Budget	FY 2007 Projected
Subdivision Plan Inspection Fee	(190,252)	(272,000)	(272,000)	(390,000)
Street Cut Inspection Fee	(101,674)	(132,000)	(132,000)	(206,000)
Traffic Signals	(56,608)	0	0	(100,000)
Parking Meters	0	0	0	(500,000)
Signs-Loading Zones	(72,531)	(14,000)	(14,000)	(14,000)
Arc Lights	(8,688)	(4,000)	(4,000)	(4,000)
Sale Of Reports	(260)	(4,000)	(4,000)	(4,000)
St TN Highway Maint Grant	(121,604)	(80,900)	(80,900)	(80,900)
Sidewalk Permit Fees	(58,484)	(48,000)	(48,000)	(75,000)
Tfr In - Storm Water	0	(52,000)	0	0
Total Charges for Services	(610,101)	(606,900)	(554,900)	(1,373,900)

## Operating Budget

Category	FY 2005 Actual	FY 2006 Forecast	FY 2006 Budget	FY 2007 Projected
Personal services	5,445,868	5,255,699	5,501,024	4,978,078
Materials & supplies	380,193	414,494	682,129	377,969
Capital outlay	0	0	96,800	0
Gross Expenditure	5,826,061	5,670,193	6,279,953	5,356,047
Expense Recoveries	(1,911,517)	(1,588,638)	(2,085,638)	(1,287,516)
Total Expenditures	3,914,544	4,081,555	4,194,315	4,068,531
Charges for Services	(488,497)	(606,900)	(554,900)	(1,373,900)
Net Expenditures	3,426,047	3,474,655	3,639,415	2,694,631
<i>Funded Staffing Level</i>	102.08	94.50	119.00	89.00

Legal level consolidation of *Civil Design & Administration, Survey, Mapping & Property, Construction Inspections, Traffic Engineering and Building Design & Construction.*

**Description**

*To provide timely and quality engineering services in the design of civil works projects and the review of private developments to protect the safety of the public.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	1,515,097	1,473,311	1,541,569	1,314,227
Materials & supplies	72,115	76,367	195,400	69,891
Capital outlay	0	0	5,600	0
Gross Expenditure	1,587,212	1,549,678	1,742,569	1,384,118
Expense Recoveries	(447,876)	(276,000)	(276,000)	(325,000)
Total Expenditures	1,139,336	1,273,678	1,466,569	1,059,118
Charges for Services	(488,497)	(606,900)	(554,900)	(1,373,900)
Net Expenditures	650,839	666,778	911,669	(314,782)
<i>Funded Staffing Level</i>	24.15	21.58	31.00	20.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Develop roadway and drainage construction plans in a timely manner and comply with all applicable local, state and federal guidelines and policies	To execute design contracts for all Capital Improvement Program (CIP) projects when fiscal year funds are first allocated	Percent of CIP projects with executed contract first year	100%	100%	100%
	To complete design for all CIP projects within second year after funds are allocated	Percent of CIP plans signed by City Engineer second year	100%	100%	100%
	To complete design reviews, on the average, within 20 working days of submittal	Percent of CIP design reviews completed within 20 days	90%	90%	90%
Minimize the time taken to review land development submittals	To review contract type plans within 14 days of receipt	Average number of days to review contract type plans	10	10	10

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
		Percent of contract type plans reviewed within 12 days	90%	100%	100%
Improve delivery time of land development contracts to developers	To deliver contracts to developers within 10 working days of receiving a bondable set of plans from Plans Review	Average number of days to deliver land development contracts	10	15	15
		Percent of land development contracts delivered within 15 days	90%	100%	100%

**Description**

*To provide quality survey services so that accurate information is available to engineers using the data. Provide timely and accurate traffic counting so that engineers using the data can make better decisions.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	971,796	873,593	783,516	821,236
Materials & supplies	54,385	77,743	69,489	56,703
Gross Expenditure	1,026,181	951,336	853,005	877,939
Expense Recoveries	(103,333)	(190,000)	(190,000)	(190,000)
Net Expenditures	922,848	761,336	663,005	687,939
<i>Funded Staffing Level</i>	20.00	18.17	18.00	17.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Extend vertical control survey network	To set 50 concrete survey markers and tie them into the vertical survey benchmark network	Number of vertical survey markers set	26	25	20
Establish horizontal control survey network	To set 50 new concrete survey markers and determine their horizontal coordinates	Number of horizontal control markers set	29	25	20
Provide timely traffic counting and speed study services	To complete any new speed hump traffic count requests within 15 days of receipt	Percent of new requests completed within 45 days	100%	100%	100%
Ensure adequate training of staff	To train each crewmember in each of the four areas of survey	Percent of survey shop crew members cross trained	100%	100%	100%



**Description**

*To maintain the official records of the City of Memphis regarding mapping and all properties acquired for public rights-of-way in order to serve the citizens and respond to requests for information about City-owned property.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	157,434	137,442	169,072	137,442
Materials & supplies	16,393	16,748	24,900	16,748
Net Expenditures	173,827	154,190	193,972	154,190
<i>Funded Staffing Level</i>	3.87	3.00	4.00	3.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Maintain up-to-date mapping and property information for the City of Memphis and disperse that information in a timely manner, as requested	To maintain up-to-date map annually	Percent of records up-dated within same calendar year	80%	75%	70%
	To serve all customers requesting information within 24 hours	Number of information requests	3,500	4,000	4,500
		Percent served within 24 hours	90%	85%	80%

**Description**

*To protect the public interest and City's investment in all public improvements through the inspection of all construction activities within public rights-of-way and easements.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	1,214,826	1,252,521	1,284,403	1,252,521
Materials & supplies	178,465	177,874	253,740	173,865
Capital outlay	0	0	1,200	0
Gross Expenditure	1,393,291	1,430,395	1,539,343	1,426,386
Expense Recoveries	(825,573)	(900,000)	(900,000)	(500,000)
Net Expenditures	567,718	530,395	639,343	926,386
<i>Funded Staffing Level</i>	21.59	24.00	26.00	24.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Properly inspect all assigned construction projects, maintain and document payments and project schedule dates	To complete pay request applications within five working days of monthly close date	Percent of pay requests processed within 5 days	95%	96%	98%
	To inspect all projects at least once a day when work is in progress	Average percent of days projects are inspected	100%	100%	100%
	To reduce the number of trench failures addressed by Drain Maintenance by 15 percent	Percent reduction in number of trench failures	15%	15%	15%
	To reduce projects exceeding the average days of project schedule by 15 percent, to be in compliance	Percent reduction in projects exceeding schedule	15%	10%	15%
	To inspect all street cuts done by MLG&W	Percent of street cuts inspected	90%	90%	90%

**Description**

*To improve safety and quality of life within the city of Memphis by providing design, operation and maintenance supervision services for all permanent and temporary traffic control devices within the public rights-of-way and ensure that these devices are utilized in accordance with the appropriate city, state and federal laws and standards.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	880,000	774,141	959,621	707,961
Materials & supplies	31,124	41,174	88,760	36,174
Capital outlay	0	0	75,000	0
Gross Expenditure	911,124	815,315	1,123,381	744,135
Expense Recoveries	(104,875)	(117,410)	(117,410)	0
Net Expenditures	806,249	697,905	1,005,971	744,135
<i>Funded Staffing Level</i>	21.76	17.75	29.00	15.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Provide a wide variety of traffic engineering services to promote the safe and efficient flow of traffic throughout the city of Memphis	To complete all Priority 4 in-house studies/ investigations within 8 weeks of assignment, allowing 4 weeks for the data collection by survey and four weeks for analysis/report	Percent of Priority 4 studies completed within ten weeks	100%	100%	100%
	To complete traffic signal plan design by the assigned deadline	Percent of traffic signal designs completed by the deadline	100%	100%	100%
	To repair or replace broken parking meters within 48 hours of notification	Percent of meters repaired within 48 hours	100%	100%	100%
	To complete Land Development traffic control plan (TCP) review by assigned completion date	Percent of TCP reviewed by assigned completion date	100%	100%	100%

**Description**

*To provide quality engineering and architectural services in support of building projects of all City divisions so that facilities are provided for public use in a timely and cost-effective manner.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	706,715	744,691	762,844	744,691
Materials & supplies	27,711	24,588	49,840	24,588
Capital outlay	0	0	15,000	0
Gross Expenditure	734,426	769,279	827,684	769,279
Expense Recoveries	(429,860)	(105,228)	(602,228)	(272,516)
Net Expenditures	304,566	664,051	225,456	496,763
<i>Funded Staffing Level</i>	10.71	10.00	11.00	10.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Expedite implementation of CIP projects	To execute design contracts for all CIP projects within the first six months of the fiscal year that funds are allocated and the written project is received from customer division	Percent of contracts with programs executed within 6 months	100%	100%	100%
	To execute design contracts within 60 days after written program is received from customer division	Percent of design contracts executed within 60 days	50%	75%	75%
	To complete design within 18 months from date funds and program are available for all projects \$4.0 million or less	Percent of projects with completed designs within 18 months	100%	100%	100%
Minimize design cost	To hold average design cost to 9% of total construction costs on projects	Average design cost percentage	8%	8.50%	8.50%

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Execute construction contracts in a timely and cost efficient manner	To execute construction contracts within 120 days of receiving bids	Percent of construction contracts executed within 120 days	100%	98%	98%
	To execute construction contracts within the original cost estimate	Percent of projects that bid within estimate	100%	100%	100%

**Description**

*To improve safety and quality of life within the city of Memphis by installing and maintaining proper signage and pavement markings for both pedestrian and vehicular traffic.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	1,674,738	1,786,362	1,884,057	1,748,372
Materials & supplies	513,259	856,535	808,346	675,760
Gross Expenditure	2,187,997	2,642,897	2,692,403	2,424,132
Expense Recoveries	(11,472)	(51,000)	(51,000)	0
Total Expenditures	2,176,525	2,591,897	2,641,403	2,424,132
Charges for Services	(121,604)	0	0	0
Net Expenditures	2,054,921	2,591,897	2,641,403	2,424,132
<i>Funded Staffing Level</i>	29.82	29.58	34.00	28.33

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Maintain all signs and markings within the city of Memphis in a manner consistent with applicable standards	To repair all stop signs and yield signs within 24 hours of notification	Percent of signs repaired within 24 hours	100%	100%	100%
	To repair/install 4,000 traffic signs per sign crew	Number of traffic signs repaired/ installed	17,605	15,000	15,000
	To re-stripe all city streets annually	Number of street miles re-stripped annually	2,200	1,090	2,332

**Description**

*Traffic Signal Maintenance works to increase the safety of pedestrians, motorists and goods movement by maintaining existing traffic signals and installation of new signals at intersections throughout the city of Memphis.*

**Operating Budget**

<b>Category</b>	<b>FY 2005 Actual</b>	<b>FY 2006 Forecast</b>	<b>FY 2006 Budget</b>	<b>FY 2007 Projected</b>
Personal services	1,673,682	1,719,964	1,837,514	1,719,964
Materials & supplies	545,170	720,611	715,691	705,611
Gross Expenditure	2,218,852	2,440,575	2,553,205	2,425,575
Expense Recoveries	(31,272)	(39,000)	(39,000)	0
Net Expenditures	2,187,580	2,401,575	2,514,205	2,425,575
<i>Funded Staffing Level</i>	29.79	29.00	33.00	29.00

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2005</b>	<b>Estimated FY 2006</b>	<b>Proposed FY 2007</b>
Properly install all traffic signals and signal devices within the City of Memphis	To complete installation of new signal locations within two months of assignment	Percent of signals installed within 2 months	100%	100%	100%
Maintain all traffic signal and signal devices within the City of Memphis	To conduct preventive maintenance on all traffic signals once per year	Number of signals maintained annually	625	0	800
	To repair all traffic signal malfunctions within 24 hours of notification	Percent of signals serviced within 24 hours	100%	100%	100%

# CITY ENGINEERING

# AUTHORIZED COMPLEMENT

Service Center/Position Title	Authorized Positions	Service Center/Position Title	Authorized Positions
<u>Civil Design &amp; Administration</u>		<u>Construction Inspections</u>	
ADMR LAND DEVELOPMENT	1	CLERK GENERAL A	1
ADMR TRANS PLAN DESIGN	1	INSP ZONE CONSTRUCTION	19
ASST ADMINISTRATIVE	1	MGR CONSTRUCTION INSP	1
CLERK ACCOUNTING A	2	SUPER CONSTRUCTION INSP	5
CLERK GENERAL A	1	<b>Total Construction Inspections</b>	<b>26</b>
CLERK GENERAL B	1		
COORD ADA RAMP PROGRAM	1	<u>Traffic Engineering</u>	
COORD ADMIN SUPPORT	1	CLERK GENERAL A	2
COORD LAND DEV	1	COLLECTOR METER	2
COORD PLANS REVIEW	1	ENG DESIGNER AA	3
ENG DESIGNER AA	2	ENG DESIGNER TRAFFIC CALM	2
ENGINEER CITY CIVIL DESIGN	1	ENGINEER CITY TRAFFIC	1
ENGINEER CITY	1	ENGINEER TRAFFIC CALM SENIOR	2
ENGINEER DESIGN	1	ENGINEER TRAFFIC	4
ENGINEER DESIGN SENIOR	4	REPAIRER PARKING METER	1
ENGINEER PLANS REVIEW SENIOR	1	SECRETARY B	1
ENGINEER STRUCTURAL	1	SECRETARY C	1
REVIEWER PLANS	1	SUPER PARKING METER REP	1
SECRETARY B	1	TECH ENGINEERING AA	2
SECRETARY C	1	TECH PARKING ENFORCEMENT	6
SPEC DOCUMENT	1	TECH SIGNAL	1
TECH ENGINEERING AA	3	<b>Total Traffic Engineering</b>	<b>29</b>
TECH LAND DEV CONTRACT	2		
<b>Total Civil Design &amp; Administration</b>	<b>31</b>	<u>Building Design &amp; Construction</u>	
<u>Survey</u>		ADMR BLDG DESIGN CONST	1
AIDE ENGINEER	4	CLERK GENERAL A	1
CHIEF SURVEYOR PARTY	3	ENGINEER CIP COORDINATING	1
CLERK GENERAL A	1	MGR ENG PROJECT	7
COUNTER TRAFFIC	5	SUPER OFFICE ENG	1
MGR SURVEYOR	1	<b>Total Building Design &amp; Construction</b>	<b>11</b>
OPER SURVEY INST	3		
SUPER TRAFFIC INVEST	1	<u>Signs &amp; Markings</u>	
<b>Total Survey</b>	<b>18</b>	MGR STREET SIGNS MARK	1
<u>Mapping &amp; Property</u>		PAINTER	19
SUPER MAPPING	1	PAINTER APP	6
TECH ENGINEERING A	1	PAINTER LO	2
TECH ENGINEERING AA	2	SPEC FLAGMAN OFFICER	6
<b>Total Mapping &amp; Property</b>	<b>4</b>	<b>Total Signs &amp; Markings</b>	<b>34</b>





**CITY ENGINEERING****AUTHORIZED COMPLEMENT**

Service Center/Position Title	Authorized Positions	Service Center/Position Title	Authorized Positions
<u>Signal Maintenance</u>			
AIDE SIGNAL	11		
CLERK GENERAL A	1		
DISPATCHER	1		
MGR SIGNAL MNT CONST	1		
SPEC PROCUREMENT	1		
TECH SIGNAL	18		
<b>Total Signal Maintenance</b>	<b>33</b>		
 <b><u>TOTAL CITY ENGINEERING</u></b>	 <b><u>186</u></b>		



